

Mosquito Control on Wildlife Lands

Bob Humphries



Points to be Covered

- Wildlife Division Mission
- Laws/Principles/Rules governing management of Wildlife lands
- Factors considered by workgroup while developing procedure
- Procedure
- Questions/Discussion



Wildlife Division Mission

To enhance, restore and conserve wildlife resources, natural communities, and ecosystems for the benefit of Michigan's citizens, visitors, and future generations.

















State Game Areas



DNR-Wildlife-Div. Administered Public Lands over 2000 Landuse/Landcover

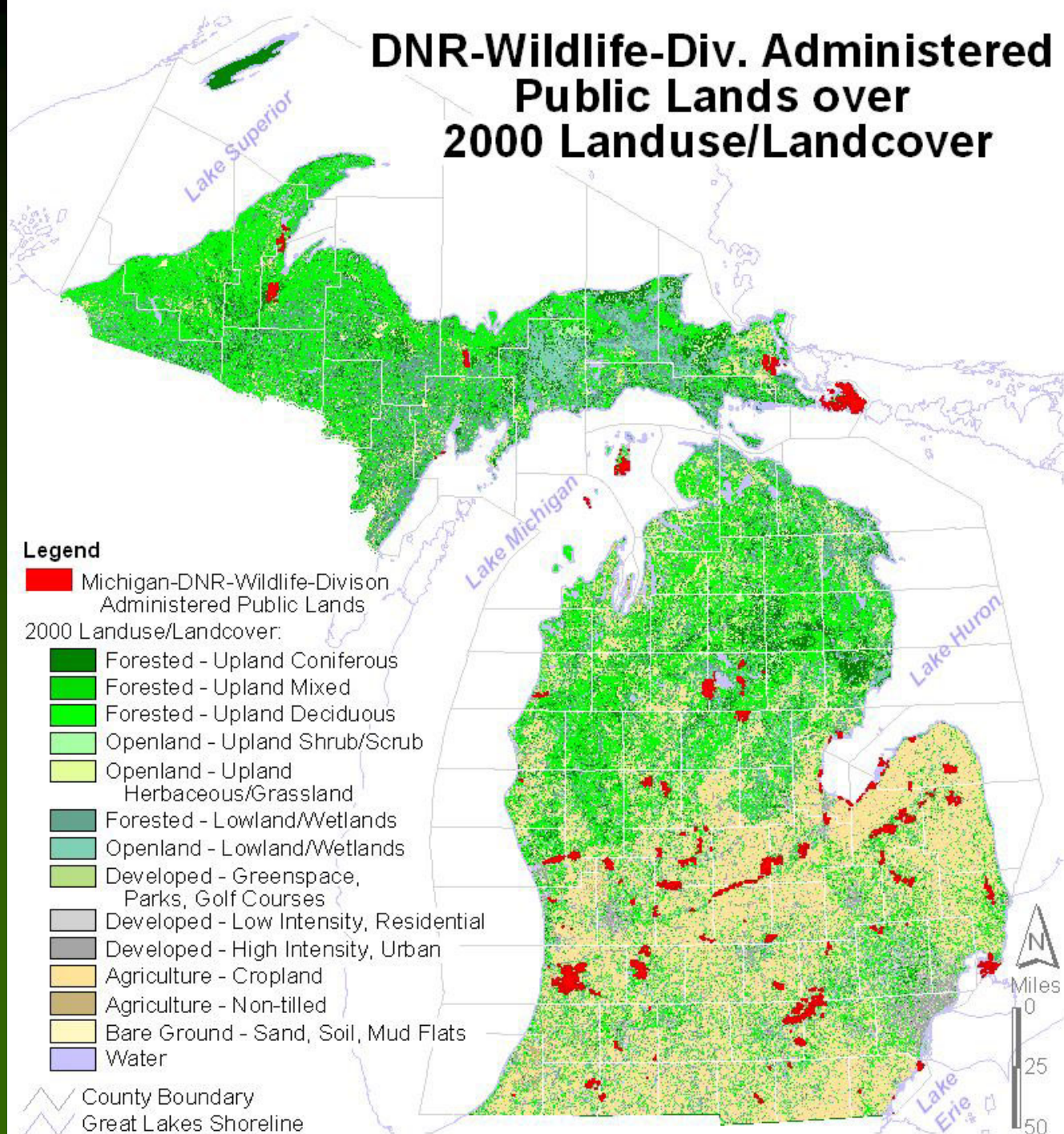
Legend

 Michigan-DNR-Wildlife-Division
Administered Public Lands

2000 Landuse/Landcover:

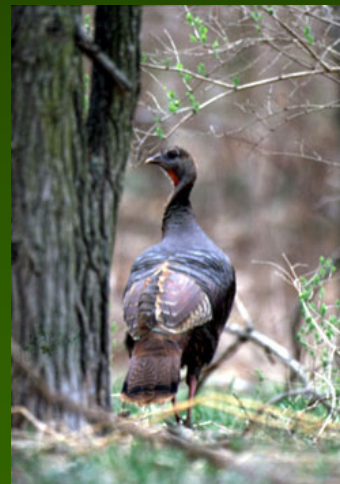
-  Forested - Upland Coniferous
-  Forested - Upland Mixed
-  Forested - Upland Deciduous
-  Openland - Upland Shrub/Scrub
-  Openland - Upland
Herbaceous/Grassland
-  Forested - Lowland/Wetlands
-  Openland - Lowland/Wetlands
-  Developed - Greenspace,
Parks, Golf Courses
-  Developed - Low Intensity, Residential
-  Developed - High Intensity, Urban
-  Agriculture - Cropland
-  Agriculture - Non-tilled
-  Bare Ground - Sand, Soil, Mud Flats
-  Water

 County Boundary
 Great Lakes Shoreline



Federal Aid in Wildlife Restoration Act

“The Secretary of the Interior is authorized to cooperate with the States, through their respective State fish and game departments, in wildlife-restoration projects as hereinafter set forth; but no money apportioned under this Act to any State shall be expended therein until its legislature, or other **State agency authorized by the State constitution** to make laws governing the conservation of wildlife, **shall have assented to** the provision of this Act and shall have passed laws for the conservation of wildlife which shall include **a prohibition against the diversion of license fees paid by hunters for any other purpose than the administration of said State fish and game department,...**”



Natural Resources and Environmental Protection Act

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT (EXCERPT) Act 451 of 1994

324.40501 Wildlife restoration; authority of department to cooperate with federal government; use of hunters' license fees. [M.S.A. 13a.40501]

Sec. 40501. The department shall perform such acts as may be necessary to conduct and establish wildlife restoration, management, and research projects and areas in cooperation with the federal government as defined in chapter 899, 50 Stat. 917, 16 U.S.C. 669 to 669b and 669c to 669i, commonly known as the federal aid in wildlife restoration act, and with rules and regulations promulgated by the United States secretary of agriculture under that act; and in compliance with that act, **funds accruing to this state from license fees paid by hunters shall not be used for any purpose other than game and fish activities under the administration of the department.**



Issues

- Health issues
 - Human
 - Wildlife
 - Livestock and pet
- Mosquito borne diseases
 - WNV
 - Other insect-borne (arboviral) encephalitides
- Wildlife Division Public Trust Responsibilities
 - Wildlife health
- Food source for wildlife
 - Direct kill of non target species by pesticide (generally adulticides) possibly of listed species
 - Butterflies including listed species
 - Stewardship of public hunting areas
 - Lands MUST be managed for wildlife
 - PR constraints does not allow for diversion
 - Provide for public understanding of the importance of wildlife lands



Priorities

- Respond appropriately to human health issues
- Respond appropriately to address wildlife health issues
- Maintain good wildlife stewardship
- Ensure that other agencies and public are aware of our procedure and that it allows for mosquito control when treatment is warranted.



Strategies

- Avoid determination of diversion by FWS and the potential to lose federal funding we must comply with the P-R act
- Identify no treatment areas (e.g. protect sensitive areas and/or species)
- Provide specific situations when mosquito control could be implemented
- Permit process mandatory
- Identify T&E species affected by Federal and State Law
- Require permittees to provide written justification for treatment
- Treatments approved on science based need by:
 - Utilizing the knowledge of local public health offices
 - Identifying other unintended effects (e.g. loss of midge larva which is a very important first food available for migrants)



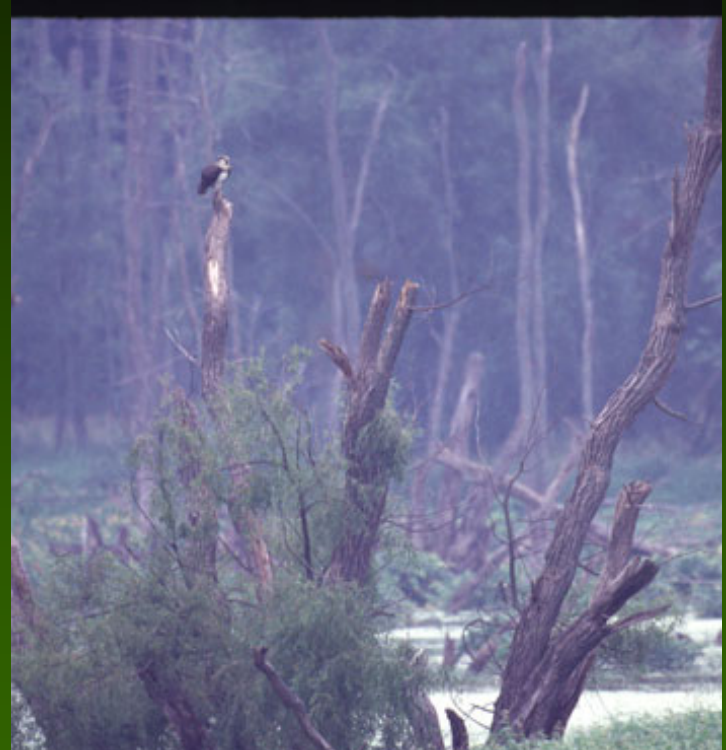
Mosquito Control on Wildlife Division Administered Lands

- Mosquito larvae is an important wildlife food resource, control of mosquitoes will only be allowed where a documented human threat exists.
- Wildlife Management Unit Supervisors working with local government officials determine a high probability of disease carrying mosquitoes originate on Wildlife lands.
- Wildlife Management Unit Supervisors will respond appropriately to a mosquito borne disease threat.



Use of Pesticide on Wildlife Land

- There is evidence of an increasing risk for human infection
- This risk will be substantially lowered by the pesticide(s)
- The application of pesticides to the Wildlife lands is superior to other available approaches to manage disease risk
- A permit for mosquito control has been issued by the Management Unit Supervisor
- All other required permits and regulations are obtained and followed



Questions

